California's Living Marine Resources:
A Status Report

The Resources Agency
The California Department of Fish and Game

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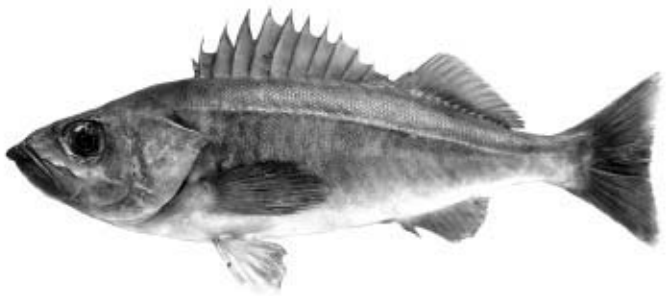
Chilipepper

History of the Fishery

The chilipepper (*Sebastes goodei*) is one of California's most important rockfish species; it is a major contributor to commercial and sport landings. In fact, from 1996 through 1998 chilipepper was ranked first in statewide commercial rockfish landings, with an annual average of over 3.8 million pounds. Important ports of landing are throughout central and much of northern California, including Fort Bragg, Bodega Bay, San Francisco, Princeton, Monterey, Moss Landing, and Morro Bay. Chilipepper also contribute to southern California rockfish landings, although not so heavily.

In the late 1800s, chilipepper and most other rockfish were caught by Portuguese longline fishermen who fished Monterey Bay from small two or three-person vessels. Longlines provided most, if not all, rockfish landings until the mid-1940s. Improvements in otter trawl technology subsequently led to trawl gear replacing longlines as the primary gear used to catch rockfish. Trawl gear enabled fishermen to make much larger landings with larger vessels. Trawlers have since accounted for the great majority of chilipepper landings, followed by set gill net and hook-and-line gears. During the 1990s, gill net landings have declined to very low levels, whereas hook-and-line gears have comprised a relatively higher portion of the catch.

Historically, chilipepper was not considered an important component of the party boat angler's catch in central and northern California due to its deep offshore distribution. In the early 1980s, Monterey and Santa Cruz party boat skippers began fishing chilipepper schools in the vicinity of the Monterey underwater canyon in late spring through summer. In contrast, southern California chilipepper partyboat landings peak during the winter months. Chilipepper was ranked third among rockfishes taken off central and northern California in 1989-1990, but its relative importance in the recreational fishery has dwindled throughout the 1990s. Since 1995, sport landings have comprised less than two percent of the total chilipepper catch.



Chilipepper, *Sebastes goodei*
Credit: DFG

Status of Biological Knowledge

Chilipepper range from Queen Charlotte Sound, British Columbia to Magdalena Bay, Baja California. Adults are found on deep rocky reefs, as well as on sand and mud bottoms, from 150 to 1,400 feet; juveniles school and are frequently found in shallow nearshore waters, particularly in kelp beds. Spawning occurs from September to April with a peak occurring in December and January. About 50 percent of female chilipepper are sexually mature at four years when they are between 11 and 12 inches, while males mature at two years and between eight and nine inches. Chilipepper attain a maximum age of 35 years and a size of up to 23 inches, with females growing substantially larger than males.

Adults feed on krill and other small crustaceans, squid, and a variety of small fishes. Probable predators of chilipepper include marine birds and mammals, king salmon, lingcod, Pacific hake, sablefish, and other rockfish.

Status of the Population

The last stock assessment of chilipepper, conducted in 1998, indicated that unlike most other rockfish populations, the stock was in quite good condition. At that time, the population size was determined to be 35,000 tons, which is about 50 percent of the unexploited level. The healthy status of the chilipepper stock has been due to a very strong 1984 year-class that supported the fishery throughout the 1990s, although recent recruitments have been lower and the stock is slowly but steadily declining. Based on the assessment, the Pacific Fishery Management Council set the acceptable biological catch at 4,100 tons, although the Council lowered the total allowable catch (TAC) to 2,000 tons out of concern for bocaccio bycatch in chilipepper fisheries. Even with the lower TAC, the various fisheries have not been catching the quota.

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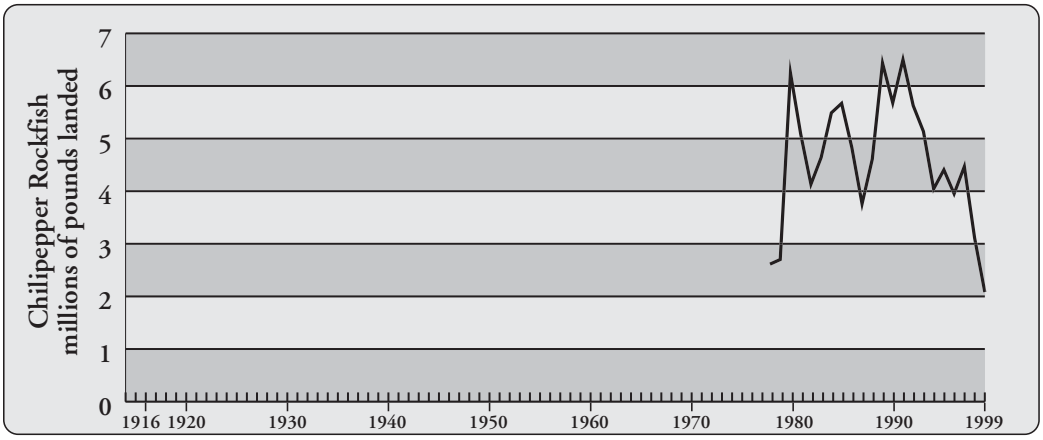
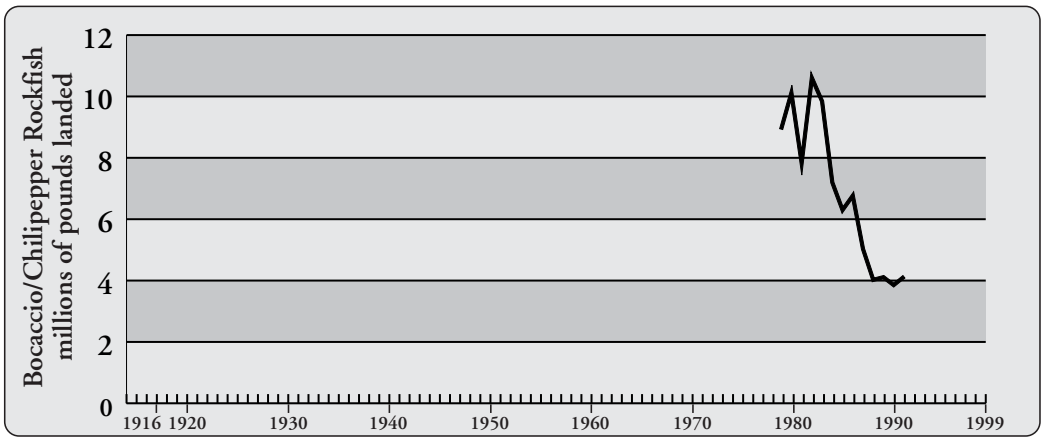


Commercial Landings 1916-1999, Chilipepper Rockfish
Data Source: CalCom Database utilizing DFG commercial landing receipts. Expansions of port samples are conducted by Pacific States Fishery Management Council with input from DFG.



Commercial Landings 1916-1999, Bocaccio/Chilipepper Rockfish
Data Source: DFG Catch Bulletins and commercial landing receipts. The market category Bocaccio/Chilipeper Rockfish were aggregated within the market category Rockfish prior to 1979.

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